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Faculty of Business Administration

Master Dissertation

The Impact of Financial Incentives and Students

Accommodation in Academic Performance in A 'Sharqiyah

University

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The Impact of Financial Incentives and Students Accommodation in Academic Performance in A 'Sharqiyah University

Submitted to the College of Business Administration in fulfilment for the Master of Business Administration.

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Dissertation Approval

The Impact of Financial Incentives and Students Accommodation in Academic Performance in A 'Sharqiyah University.

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Declaration

I acknowledge that the source of the scientific content of this dissertation has been determined
and not part of any other degree, and that it reflects the opinions of the researcher and his work.
Ali Mohammed Al Manji
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Acknowledgement

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List of Abbreviations

MOHERI	Ministry of Higher Education, Research, and Innovation
ASU	A'Sharqiyah University
HEIs	Higher Education Institutions
SPSS	Statistical Package for the Social Sciences
NoI	Number of Items
NoR	Number of Respondents
R	Correlation Coefficient
DV	Dependent Variable
IDV	Independent Variable
Min.	Minimum
Max.	Maximum
GPA	Grade Point Average
AGPA	Accumulated Grade Point Average
ERP	Enterprise resource planning

Abstract

This paper studies the impact of Incentive and Shelter on students' academic performance at

A'Sharqiyah University (ASU). Incentive motivates effort and better performance; ASU has

introduced a scheme to reward high achieving students by granting them scholarships. Another

variable is students' accommodation. The relationship between the provision of

accommodation and the students' academic performance is analyzed to better understand

impact it reflects on the students' academic performance. The students who were granted the

scholarship for their academic achievement, their GPA, to look how the scheme has impacted

their progress and how it helped them maintain their GPA. For the accommodation, 230 ASU

students were surveyed to understand how university-provided accommodation contributes to

the students' academic performance.

The study shows that, provision students with Financial incentives and accommodation are

positively and significantly affected the student's academic performance in A 'Sharqiyah

University.

Key words: *Incentive, motivation, accommodation, academic performance, GPA.*

XI

ملخص الدراسة

أثر برنامج المساعدات المالية وتوفير السكن على الأداء الأكاديمي لطلبة جامعة الشرقية

تهدف هذه الدراسة إلى بيان مدى تأثير عاملين من العوامل التي تؤثر على الأداء الأكاديمي لطلبة جامعة الشرقية وهما المساعدات المالية وتوفير السكن. حيث أن الجامعة قامت باعتماد لائحة للمساعدات المالية تهدف إلى تحفيز وتشجيع الطلاب على الأداء الأكاديمي. إضافة إلى ذلك تم تحليل العلاقة بين توفير السكن الداخلي للطلاب وادائهم الأكاديمي لفهم أهمية السكن الداخلي على الأداء الأكاديمي لطلبة الجامعة. و للوصول إلى أهداف الدراسة تم اعتماد المنهج الوصفي التحليلي من خلال تحليل البيانات الثانوية للطلبة الحاصلين على مساعدات مالية بناء على اللائحة لفهم مدى تأثير اللائحة على مستواهم الدراسي. أما بالنسبة لمدى تأثير السكن على المستوى الدراسي لطلبة الجامعة فقد تم إعداد استبانة لغرض جمع بعض البيانات لعدد 230 طالب وطالبة بالجامعة.

أظهرت الدراسة أن الحوافز المالية وتوفير السكن للطلاب في جامعة الشرقية لهما تأثير إيجابي وكبير على أدائهم الأكاديمي.

Chapter One: Introduction

1. Background

Higher education system contributes to the development and prosperity of any country. It has gone beyond providing different knowledge to the students and it became the basis for formulating the country's overall strategy (MOHE, 2013). In this regard, the Government of the Sultanate of Oman has paid great attention to this sector. The Higher Education institutions (HEI) in Oman commenced to appear in the early 1980 by opening industrial colleges, education colleges and health institutes. Year 1986 witnessed the opening of the first university in Oman which is Sultan Qaboos University. In 1994, the Ministry of Higher Education was established by Royal Decree to implement the plans and programs in the fields of higher education and to supervise the HEIs in Oman. During the second half of the 1990s, the private sector started to get involved in contributing to higher education sector by establishing private colleges and universities, in addition to the government ones; this was regulated by Royal Decree No. 41/96 that articulated the regulations and procedures for the establishment of private colleges and institutes. The current year (2020) witnessed the establishment of another public university, in addition to Sultan Qaboos University, which is the University of Technology and Applied Sciences. It is made by merging the Colleges of Applied Sciences and Colleges of Technology. Currently, there are eight private universities and nineteen private colleges, in addition to the two government universities and other government colleges and institutions. (MOHE, 2020).

The students vary in their sponsors; students on scholarships from the Ministry of Higher Education (MOHE), other sponsors related to work or charity, and self-sponsored students. Students who have scholarships from the Ministry or other sponsors represent the largest percentage of students in private HEI in the Sultanate. According to the MOHE report (2016), the percentage of students on scholarship in private HEIs in the Sultanate during the academic year 2015/2016 reached 57% of the total number of students. Scholarship students are distributed annually through the Higher Education Admission Centre (HEAC) based on the students' choices and the admission criteria of the HEIs. HEAC statistics (2020) show that the top performing students in the General Education Diploma (GED) choose to go abroad on external scholarships. The next on their choice list is SQU and other government colleges and institutes. Those who are not admitted into the above mentioned HEIs, they compete to secure internal scholarships which are distributed amongst private HEIs in the Sultanate. The students

who compete for scholarships in private HEIs are usually those who did not get a place in government HEIs because those institutions' admission criteria are high.

The admission criteria for the private HEIs is lower than SQU and other government HEIs. The admission to HEIs in Oman is based on the GED score and the students' choices of majors. For SQU, it is rare to admit students who obtained a GED score lower than 84% for male students and 90% for female students, depending on the major. The other government HEIs usually admit male students who got between 70 and 83% and female students who scored 80-90%. However, private HEIs attract the students who did not secure a seat at the other HEIs; the admission criteria on some majors can be as low as 50% (which is the passing score in GED), depending on the major. This poses two challenges to the HEIs: 1) attracting students to choose them 2) retaining the students until they complete their degrees. HEIs implement many strategies to attract and retain students during their college life. Some of those strategies might be financial e.g. granting scholarships and student aid.

Maslow points out that humans have certain needs to thrive in life; one of which is shelter where it is safe, non-threatening and clean. The facilities that HEIs provide to students can play a role in their retention and may be their success. HEIs in Oman provide state of the art educational facilities e.g. classrooms, science laboratories, Learning Resource Centers (LRC), and computer laboratories. Additionally, HEIs provide other non-academic facilities like the Students' Center, dining facilities, sports playgrounds and students' accommodation. Facilities at the HEIs are considered like a competitive advantage for marketing and attracting students to selecting an institution where they want to study. Therefore, HEIs compete to provide better facilities, especially better, cleaner, and safe students' accommodation.

Before 1970, there were no higher education institutions (HEIs) in the Sultanate, there were only three public schools. The first HIE established was Banking Institute of Oman in 1983. In 1983, the first higher education institution was established in the Sultanate, which is Banking Institute, (currently known as College of Banking and Financial Studies). During the year 1984, several higher education institutions were opened, which are: colleges of teachers (which currently converted to Colleges of Applied Sciences) to cover the need of teachers at that time. Followed by the opening of the Industrial Technical College in Muscat (currently University of Technology and Applied Sciences- Higher College of Technology). The same year also witnessed the opening of some nursing institutes to meet the community's need for nurses.

The year 1986 witnessed the opening of the first university in Oman, Sultan Qaboos University, which contained five colleges: the College of Education, the College of Engineering, the College of Medicine and Health Sciences, the College of Agricultural and Marine Sciences, and the College of Science. After that, the College of Arts was added in 1987, the College of Commerce and Economics was added in 1993, the College of Law was added in 2006, and finally the College of Nursing was added in 2008.

The establishment of the Ministry of Higher Education in 1994 came to govern the educational system of higher education and scientific research and evaluate it in accordance with national and international standards. (Higher Education in the Sultanate of Oman, 2019). With the establishment of the Ministry of Higher Education, a private higher education institution emerged and geographically distributed in the Sultanate, offering different programs and specializations Which aims to supply the labour market in the Sultanate with qualified graduates.

To ensure the quality of higher education provided by HEI in the Sultanate and maintaining the international standards of graduates, Oman Academic Accreditation Authority (OAAA) was established in 2010 (Higher Education in the Sultanate of Oman, 2019). OAAA mission is "to provide efficient, effective and internationally recognized services for accreditation in order to promote quality in higher education in Oman and meet the needs of the public and other stakeholders' (Vision, Mission and Values, 2019). OAAA is in charge of building a system of standards and processes for evaluating Omani higher education institutions, developing and updating the Framework of National Qualification, conducting quality audits and preparing annual reports on their quality. (OAAA Establishment and Responsibilities, 2019).

Because HEIs in Oman are associated with several government agencies, such as Health Institutes are under the Ministry of Health, Colleges of Technology are under the Ministry of Manpower (MoM), Colleges of Applied Sciences are under the Ministry of Higher Education (MoHE), The Education Council was founded in 2012 to integrate all HEIs under one umbrella and to define general policy and quality education in Oman, as well as to monitor education development plans and link them with needs of the labor market (Abstract on the Education Council, 2019). Oman's higher education system is relatively recent, with the first HEI opening in 1983. The main goal of HEIs is to provide nationwide skilled personnel who can engage in the labor market and add to the growth of the economy; the Council maintains the quality of

HEIs through OAAA through a stringent process that begins with a self-audit conducted by the HEI and ends with a standard-based assessment.

In order to attract and retain students, private educational institutions in the Sultanate seek to provide a stimulating educational environment by offering new programs and specializations that meet the needs of the labor market, as well as through the services and facilities provided by private educational institutions to their students.

Internal scholarships (students sponsored by government) constitute the largest number of the total students studying in higher education institutions in the Sultanate. This means that the government are closely monitoring the progress and the retention of the sponsored students and that HEIs should put in place measures to help students finish their courses and graduate with a degree.

After we briefly touched on the history of education in the Sultanate, it is worth talking about A'Sharqiya University (ASU), as the sample of this study will be taken from this university. ASU is one of the private HEIs in the Sultanate, seeks to motivate its students to achieve better academic performance by offering scholarships for outstanding students. Moreover, ASU has invested heavily in providing students' accommodation to female students. This paper investigates two variables: 1) the High Achieving Students Scholarship at (ASU) and its impact on the academic performance of those students and 2) the academic achievement impact that results from providing students with comfortable accommodation.

It is important as it will highlight an unexplored area at ASU which is the correlation of the scholarship and the academic performance of the eligible students for the scholarship which will indicate how successful and effective the scholarship is to achieve its purpose.

A 'Sharqiyah University (ASU) is a private university located in the north of the A' Sharqiyah governorate. It was founded in 2009 and received it is first batch of students in 2010. It is 150 km distance from Muscat the capital. ASU has five colleges which ar: college of applied and health sciences, college of business administration, college of engineering, college of arts and humanities, and college of law. There are 4,613 students at ASU, female students make up 87% of the total student population. The government sponsored students reprent around 80% of the students at ASU.

One of the of ASU's management concerns is attracting and maintaining high achieving students. To achieve this aim, ASU introduced incentive policy for high achieving students.

Furthermore, the university has a policy of hiring bilingual academic staff that are fluent in both Arabic and English; all classes are taught in English. Many students, however, are not able to study in English. As a result, Arabic-speaking professors can explain academic issues in Arabic if necessary. Another action taken by the university was to make academic advising mandatory for students. The students are required to visit their academic advisors before registering their courses as well as during the semester. This is to assist students in planning their tenure years at the university, as well as to provide academic advisers with guidance on how to study. The final step was to provide pupils the opportunity to sign up for tutoring. Tutoring is provided by fellow students who excel in the courses given. There hasn't been any research done to see if those measures are working, effective, or in need of improvement.

Problem statement

ASU has started two different initiatives to encourage better academic performance; namely: The Outstanding student's scholarship scheme and the provision of comfortable accommodation where students are safe, comfortable and can study.

There is plenty of research on the area of motivation and reward and how that can contribute positively to the students' academic performance. The university has built this scholarship policy on the research that suggests that rewards, scholarships, and grants drive the students to be persistent in their academic studies to obtain financial aid in form of a scholarship which in turn will contribute to improving the academic reputation of the University. This scholarship scheme has been introduced at the university recently and there has been no formal study on evaluating the effectiveness. To the author's best knowledge there has not been an academic paper published to explore the impact on reward on academic performance in Omani private HEIs to assess the effectiveness of such schemes.

The University has expanded its facilities and infrastructures by opening its new campus in August 2017 with total investment around OMR 25 Million. ASU provides student accommodation both on campus and off campus for female students. This is to provide the students with a safe, clean and comfortable place for living and studying where they can be around other fellow students. A safe accommodation is believed to improve the students' academic achievement by the virtue of Maslow pyramid of needs. The relationship between

the provision of housing to students and its impact on their academic performance is understudied in the Sultanate; the author's knowledge is that there is nearly nothing written about this in the context of private Omani HEIs. The study of this relationship is important as universities spend millions on the development of such accommodations.

To recap, this study addresses the High Achieving Students Scholarship Scheme, the incentive, and the student accommodation, the two variables of this study, affect the students' academic achievement. The findings of this study shed light on two variables and their effect on the academic achievement and performance, which informs the review of the two schemes.

1.1. Research Questions

This research paper looks into two precise questions:

- 1. What is the relationship between Outstanding Achievement Policy and improved academic performance?
- 2. What is the relationship between student accommodation and the students' academic performance?

1.2. Research Objectives

The objectives of this study are to:

- 1. Advance understanding of the relationship between the motivation (incentive) and the academic performance.
- 2. Advance understanding of the relationship between provision of students' accommodation and the students' academic performance.

However, there are other secondary research objectives. First, to build research informed data at the University and second, to fill the gap on this subject by studying this issue at an Omani HEI.

1.3. Significance of the Study

The significance of this study is two folded. The first is to bridge the gap in the literature in the area of financial aid and reward and academic performance in the specific context of Omani private HEIs. To the best knowledge of the author, there has not been a study to evaluate and

better understand the correlation and relationship between financial incentive and students' accommodation, and academic performance. The second, if the hypothesis is positive, is to encourage other private HEIs in Oman to consider such an approach by providing scholarly evidence backed by data.

On the practical side, as this study is targeting students at A'Sharqiyah University, this study provides empirical research for the decision making process as it evaluates and sheds light on two major items that ASU provides to students: the student housing and the financial incentive offered to outstanding students. The results of this study provides data-proven insights into the accommodation provision as ASU is considering building a new student accommodation building; the study indicates the possible benefits that provision of accommodation can offer the students to improve the students' academic performance.

Additionally, the other part of the study is to investigate the impact of the financial incentive which is instated in the Outstanding Students' Policy which is reviewed every three years. The review period is approaching; this study provides the data for this review to make the decision to continue, improve or change the policy.

1.4. Operation definitions

Motivation is a concept that is familiar and popular. Motivation is the desire or drive that makes us do something better or more. It can be internal i.e. interest or inclination or external i.e. to seek money or prestige.

In this study, the relationship between two independent variables the GPA-based Scholarship and student accommodation impact the academic performance of the students. The dependent variables operate as incentives and provide shelter that can get the students motivated to do better academically.

Here is a list of the definitions that are crucial to this study:

Financial Aid: the scholarship that students obtain due to their excellent academic performance and it is applied semesterly. This aid is manifested in a discount in the total cost of a semester, usually the semester following the semester that a student achieved GPA more than 3.25 in 4-point-GPA scale.

Students Accommodation: housing that is provided and run by the university.

Academic performance: the effort and hard work students put into their studies manifested in the semesterly GPA that the students earn.

1.6. Dissertation Structure

The below chart illustrates the structure of the dissertation.

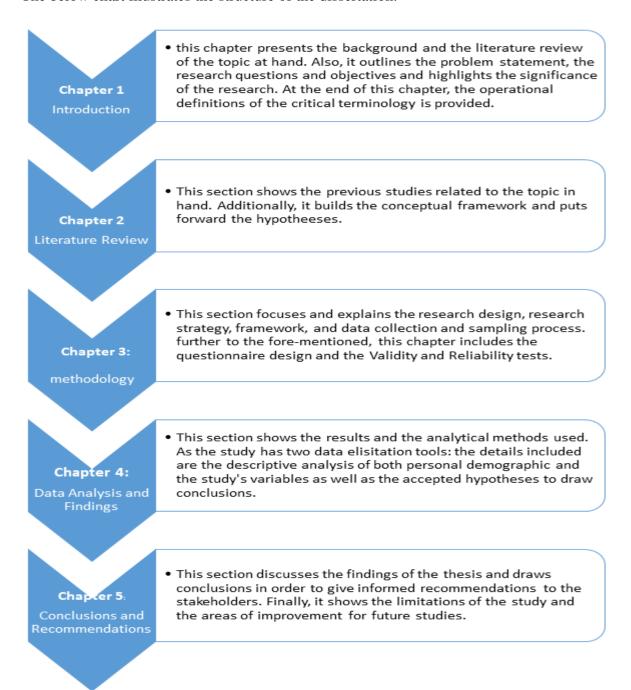


Figure 1: Structure of the dissertation

Chapter Two: Literature Review

In this section, the key previous studies on the incentive, students' accommodation and students' academic performance are critically reviewed and the interrelationships between each one is shown.

2.1. The relationship between incentive and academic performance

Performance-based scholarships (PBS) generally try to improve student outcomes by increasing the immediate financial benefits from school (Barrow, Richburg-Hayes, Lashawn, Elena, Brock, 2009). For example, payments may be contingent on meeting benchmark performance goals such as a minimum GPA. Thus, the incentives can be thought of as increasing the immediate financial rewards to effort. Because PBS provides more immediate financial rewards to effort, it would be expected that PBS students would allocate more time to studying and other educational activities which should translate into greater educational attainment. (Barrow, et al, 2009).

Barrow and Rouse (2013) argue that the effectiveness of PBS programs is dependent on both the size of the scholarship as well as the impact of the program on the student's GPA production function. The direct effect of increasing the size of the incentive payment in the current semester is contemporaneous in effort but has no impact on the effort of future semesters. However, there are indirect effects leading to impacts in future semesters. Those impacts might include the students studying more effectively or better time management by "habit-forming".

At the same time, cognitive psychologists suggest that while incentive payments may motivate the students to do better in the short term, the students might be motivated for the "wrong" reasons. They distinguish between the internal (or intrinsic) motivation in which a student is motivated to work hard because they find working hard enjoyable and they enjoy studying and external (or extrinsic) motivation where the student is motivated because it leads a desirable outcome e.g. the performance-based scholarship incentive payment (Deci, Deci & Ryan, 1985).

St. John (1989) found that all types of aid packages were positively associated with year-to-year persistence during the 1970s and 1980s. Another study that highlighted this positive correlation is carried out by Cabrera, Stampen, and Hansen (1990). This study aimed at exploring the relationship between ability of pay and the student's persistence on their studies. The researchers had a national sample of 1,375 college students attending four-year

institutions. They found out that financial aid had a positive effect on student persistence. Using the students' data at the University of Oregon, Singell Jr, (2004) documented that need-based and merit-based aids significantly increased retention. Signal surveyed those who dropped out; he concluded that providing students with financial aid can retain students and encourage them to continue their studies.

The incentive schemes are based on the notion that humans, and for that matter many other orgasms, are motivated to change their behaviors positively or negatively if they gain something or suffer. Logan (1968) introduced the incentive theory and the changes in reward and its conceptual determinants with the rates of change. Kanfer (1990) reviews and evaluates modern developments in the motivation psychology and introduces several theories related to the behaviors of individuals or groups, who interact together, to perform the activities intended towards the accomplishment of a common goal. Weiner (1979) proposes a theory of motivation based on attributions of causality for success and failure with the dimensions of causality. Klinger (1975) proposed a theoretical framework based on the incentive theory that describes the consistent relationships.

2.2. The relationship between Student Accommodation and academic performance

Results from previous studies on the effect of accommodation on students' academic performance are mixed. Thampson, Samiratedu, and Rafter (1993) examined the effects of on campus residence on first-year college students and found that freshman students who lived on campus had higher retention, a greater degree of academic progress, and higher academic performance. Agron (1997) reported that studies in North America indicate that students in hall residence had higher GPA, higher retention of their grades, were able to take more credit hours and had the ability to form connections with faculty members on campus. They also had a higher propensity to be more involved in students' leadership and politics on campus.

2.2.1 Facilities Available on the On-campus Housing

Nabaseruka, (1997) also indicated that accommodation has a significant effect on the academic performance of students and in schools where accommodation facilities were good, the performance of students was also high compared to schools where accommodation facilities were poor. Other studies also found evidence of an increase in cumulative GPAs of students who lived in on-campus housing than their counterparts in off-campus housing. This was because students who lived on campus were able to benefit from the university provided

resources such as computer and information technology, university clubs, exercise facilities, and other extracurricular activities (Araujo & Murray, (2010); and Owolabi, (2015)). On the contrary, Delucchi, (1993) examined a 'college town' where most students who lived off-campus and were in close walking distance of their lecture hall and university resources and found no statistically significant difference in academic achievement between students that live on campus and off-campus. Zhao & Kuh, (2004) argued that the impact of student accommodation on a university student's academic performance may also depend on how satisfied the student is with the type of living arrangement.

2.2.2. Student Commute

In their Study, Kobus, Ommeren, and Rietveld (2015) showed that the students with longer commutes have less GPA. However, studies comparing the retention and academic achievement of the groups of commuters with those of students who reside on campus have achieved assorted results (Nowack & Hanson, 1985).

2.2.3. Living arrangements of on-campus

Prior research suggests that students who live on-campus encourages high academic performance through opportunities available to only students who live on campus as it gives the students who live on campus the chance to interact with their peers, faculty and access to students' extracurricular activities (Terenzini, Pascarella, and Blimling, 1996).

2.3. Theoretical Framework

ASU Outstanding Achieving Students Scholarship Scheme is based on motivation and role of incentives to trigger positive behavior. The University wants to improve academic performance of students during their academic tenure and to arrive at this end, the University implemented the Scheme. This scholarship is an extrinsic motivation for the students to do well in their academic work. Extrinsic motivation is an incentive to do something that arises from factors outside the individual, such as rewards or penalties. e.g. the promise of a bonus if one meets agreed performance targets (Oxford Reference, 2020).

The Incentive Theory of Motivation serves as the paper's anchor theory. According to this concept, the behavior is motivated by reward or an incentive. "Incentive theories evolved in the 1940s and 1950s, building on the foundation laid by drive theories. The "pull" of external

goals, such as prizes, money, or recognition, is said to motivate action in incentive theories. It's easy to imagine a variety of instances in which a specific objective, such as a promotion at work, can act as an external motivator to help activate specific behaviors (Hockenbury, 2003). This theory is based on motivation theories, which define motivation as the need or want that motivates and 'pushes' us to engage in certain behaviors in order to achieve a specific goal. This motivation is triggered by a stimulus which is the incentive. This stimulus creates a goal directed behavior that motivates a person towards a goal which alters his behavior. The Incentive Theory suggests that people get motivated to do things because of external rewards. For example, we go to work every day because of the payment.

According to King (2018), Housing instability means missing rent or doubling-up or overcrowding, having been evicted, or being homeless" (p.2). Housing instability can lead to negative impact on the physical and mental health of adults and children in the family. (King, 2018). Homeless students score less in their tests and tend to attend less classes (Walker-Dalhouse & Risko, 2008).

Based on the research questions, research objectives and the literature review the study discusses and investigates the relationship between the study variables. According to Sekaran and Bougie (2016) a variable is anything that can take on different values at various times for the same person or object or at the same time for different persons or objects. There are four main types of variables: the dependent variable, the independent variable, the moderating variable, and the mediating variable. The dependent variable is the primary interest and the main goal is to understand how it is influenced by other variables. However, the independent variable is the one that influences the dependent variable positively or negatively. The moderating variable is the one that has a strong *contingent* effect on the independent and dependent variable relationship. Finally, the mediating variable is the one that surfaces between the time the independent variables start operating to influence the dependent variable and the time their impact is felt. (Sekaran and Bougie, 2016).

This study has two independent variables; the incentive scholarship through the Outstanding Achievement Policy based on the GPA and the other is provision of student housing. The dependent variable here is the improved or increased academic performance of the students. The mediating variable is motivation. The figure below shows the different variables in play:

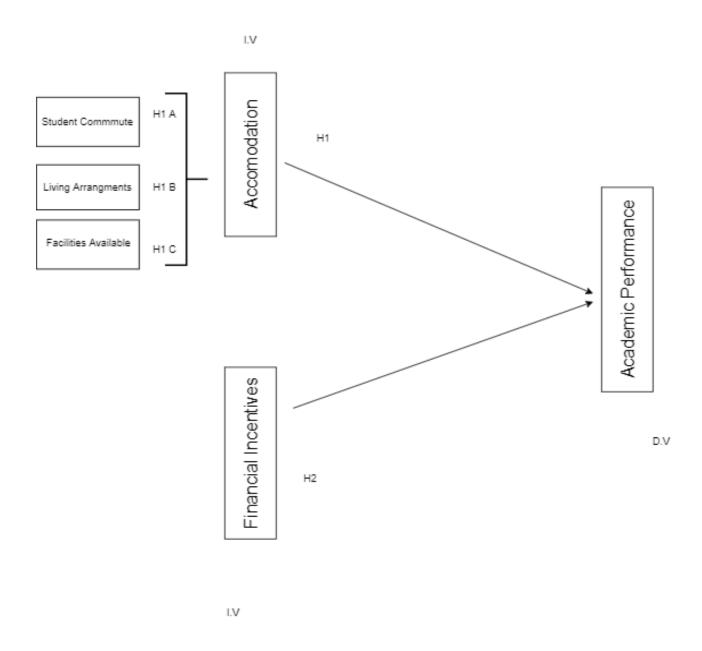


Figure 2: The Study Conceptual Framework

2.3.1. Research Hypotheses

According to the study theoretical framework, the research hypotheses are:

H1- There is a positive relationship between an Outstanding Achievement Policy and academic performance.

H2- There is a positive relationship between student accommodation and academic performance.

Chapter Three: Methodology

3.1. Introduction

There are two research questions that are of different nature. The first one is to better

understand the relationship between the financial scheme and academic performance through

GPA attainment. The second research question is to better understand the impact of provision

of student accommodation on students. In this section, the research methodology used to

answer the research questions is shared. It includes the research design, research strategy, data

collection, the study population and sample as well as the questionnaire design.

3.2. Research Design

To evaluate the relationship between the Scholarship scheme and students' academic

performance. To understand this relationship, correlation of the two variables gives a clear

indication of the relationship between the two variables. The positive correlation confirms the

validity of the theory and the effectiveness of the scholarship scheme. To arrive at this, all the

beneficiaries of the scholarship are identified and their progress is studied to understand how

the introduction of the scheme has affected their GPAs.

To understand the relationship between accommodation and academic performance, a random

group of students, around 200, is surveyed to better understand the effect of accommodation

on academic performance. To arrive at that, the students are questioned on their housing

preferences, the number of the inmates, and other factors from the literature. The questionnaire

has open-ended and closed-ended questions with a 5-point Likert scale.

3.3. Research Strategy

There are two major types of research, either basic or applied research. However, this study

classified as a basic research as it is intending to expand and provide a knowledge that help

HEIs and the society as well (Saunders et al., 2009). Furthermore, this study aims to find the

relationships between providing students with financial incentives and accommodations and

their academic performance.

As a types of analysis approaches, research categorized in two key approaches which are

inductive or deductive (Saunders et al., 2009). Since this study will look at predetermined

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related theories and hypotheses as well as testing some hypotheses this study uses the deductive approach.

This study takes a descriptive method since it aims to describe the characteristics of the study population, who are students of A'Sharqiyah University, And the extent to which their academic performance is affected by the provision of student accommodation and financial incentives.

Moreover, and based on the type of data collected) through secondary sources as well as through a questionnaire)the type of this study can be described as a quantitative study.

To arrive at the correlation of the two variables, namely: the implementation of the Scheme and increase in the GPA, the GPA attainment of self-funded students from Fall 2018 is analyzed. Specifically, of those who prior to the implementation of the Scheme were below the GPA and with the Scheme their GPAs went up. To be accurate, semesterly GPAs are considered as the scheme is applied semesterly. The students' data is obtained from ASU Admission and Registration Department to ensure confidentiality of the information based on the academic year, semesterly GPA and the self-funded students.

As for the second tool, the first step is to draft the questionnaire and have a validator look at it, preferably a PhD holder in Education. After the identification of the population and the validation of the questionnaire, the questionnaire is administered and the data is collected and analyzed to understand the relationship between the variables.

Finally, there will be discussion of the results from both tools and their interaction is drawn. Additionally, the results are discussed in view of both the research questions and the literature about incentives. The conclusions are made to provide insight and to put the results into context.

3.4. Data Collection

The data is collected through two data collection tools. The first one is through the correlation and increase in students eligible for the scholarship compared to before the implementation of the Scheme for the same students. This data is gathered through the ASU ERP system.

The second, the 230 participants are selected randomly by sending the questionnaire out to students without specifying their academic year, major, place of residence, and type of housing they have.

3.5. Study Population and Sample

Given the specific scope of the study which is the recipients of the Outstanding achieving Students Scholarship Scheme; they will be the study sample. There are approximately 200 students. Those students will be all those who got the scholarship because of their GPA.

The subjects of the second tool are sampled at random. They are students at ASU who reside in ASU managed accommodations, who also got the GPA-based scholarship. They have to provide their demographic info and answer the questions. The questionnaire is administered and distributed through the University email.

3.6. Sampling Procedures

The sampling used here is purposeful as the participants recruited meet predefined criteria which are: 1) the GPA scholarship recipients; this is the pool of candidates for the first research question investigating the relationship between GPA scholarship and improved academic performance, and 2) students who live in ASU provided housing who received the GPA scholarship; this is the pool of candidates for the second research question about the relationship between provision of housing and improved academic performance.

3.7. Instrumentation

The process of collecting the data is described for both instruments. First instrument is the quantitative one; the data collected is the GPA scholarship recipients and their GPA over the period of three semesters to understand if they sustained their achievement. This data is generated from the ERP system at ASU. The data consists of the students' GPA for the last 3 semesters (the beginning of the implementation of the scholarship scheme) to understand if they could sustain their GPA average. This information is generated from the ERP system verified by both the Admissions and Registration Department and the Finance Department. The second instrument is a questionnaire to better understand how living in the dorms impacts the students' academic performance. The questionnaire consists of ten questions that are 5 scaled i.e. strongly agree to strongly disagree. The questionnaire is designed through Google forms and circulated to the target group of students via their university email. The data collected should indicate the perception of students on how residing in ASU provided housing affected their effort improving their grades.

3.8. Questionnaire Procedures

It is worth mentioning that the questionnaire, in its development, went through the following steps:

- 1. The literature was reviewed to identify the relevant variables and attributes.
- 2. The researcher reviewed and selected the questionnaire questions based on both the research literature and the research questions.
- 3. The study supervisor examined and gave feedback on the designed questionnaire.
- 4. After incorporating the feedback, the questionnaire was shared with two academics at A'Sharqiyah University. Some comments were received and the questionnaire was rewritten accordingly.
- 5. The questionnaire was given out to twenty students to examine the validity and reliability of the study.
- 6. The pilot study showed that the questionnaire questions were clear and ready to be administered.
- 7. The questionnaire was sent out to students in the targeted population by WhatsApp and email.
- 8. There were 230 responses for the analysis.

3.8. Variable Measurement

This study focuses on two variables, namely: financial incentive and the provision of oncampus housing. The independent variable of this study is improved academic performance.

The measurement of the first variable is to look at the GPA of the students before and after the policy in question was implemented. This is based on the previous studies in the literature review. This is adopted to fit the policy in hand and the context of A'Sharqiyah University.

The other variable is the provision of on-campus housing which has three attributes, which will be explored later in this section, that indicate the impact of this variable.

The design of the variable measurement is based on the research questions and the objective of this study.

The questionnaire employs Likert Scale as the rating scale. Likert Scale is commonly used to capture attitudes and opinions of the surveyed subjects. It offers the respondents with five options ranging from strongly agree to strongly disagree with an option to remain neutral (Uma Sekaran, 2016).

The study has a total of 200 responses to the questionnaire and around 284 for the impact on GPA. The students are all from A'Sharqiyah University.

3.8.1. The Financial Incentive

The Financial incentive, leading to motivation, which increases effort in delivering the task is the basis of the Policy that A'Sharqiyah University has adopted to motivate students to improve their academic performance. This is based on the Theory of Incentive Motivation which states that 'if an employee is incentified, they make more effort'.

To assess the impact of this Policy on academic performance, a group of students was identified randomly to examine their GPAs in the three semesters before the implementation of the Policy and after.

3.8.2. Provision of On-campus Housing

This is the second dependent variable of the study. One of the questions that this study answers is the impact of providing students with on-campus housing. To measure this impact, there is a questionnaire designed with the below dimensions:

3.8.2.1. Facilities Available in the on-campus Housing

The facilities in the students' housing can play a major role in the success of students. The more it is equipped and comfortable for the students, the more their probabilities there are for the students to succeed. This has been measured by four items based on the literature using a five-point Likert Scale as shown in the below table:

	I use the Learning Resource Center because it is closer to my accommodation. I have all the facilities at my accommodation that enable me to perform better academically.		
Facilities Available in			
the on-campus Housing	The availability of study spaces supports my academic achievement.		
	The provision of study spaces and dedicated reading areas motivates the students to spend more time studying which improves their academic achievement.		

3.8.2.2. Students Commute

Students commute refers to the time the students consume traveling from their place of living to the university. Previous studies suggest that the less time the students spend commuting; the more time they spend studying. To measure this, there are four questions in the questionnaire:

	I miss classes due to the travel time between my accommodation and the University.	
Students Commute	I spend lots of time on transportation between my accommodation and the University which takes away from my study time.	
	Regular attendance of classes enhances my academic performance.	
	The classroom discussions deepen the understanding of the materials which helps me perform better academically.	

3.8.2.3 Living Arrangements of the on-campus Housing

This refers to how the students live and how their place of living is suited for success. For example, their peers and how they live. This is examined by the following questions in the questionnaire:

	I can study because the accommodation is not overpopulated.		
Living Arrangements			
of the on-campus housing	I feel safe and comfortable where I live and that encourages me to study more. Regular attendance of classes enhances my academic		
	I am motivated to read and study more because the people I live with do study and read.		

3.8. Instrument Validity and Reliability

It is important that the instrument is consistent in measuring what it is designed for and is accurately measuring it; that is reliability and validity respectively.

3.8.1. Validity

Validity relates to the questions elist the answers that they are designed to capture. (Saunders, 2009). To ensure the validity of the study, a number of steps were taken. First, the questionnaire questions are based on the literature review findings. The questions are carefully designed to capture the opinions and attitudes of the respondents. Also, as mentioned above, a draft of the questionnaire was shared with both the study supervisor and two faculty members with research expertise to comment and offer feedback on the paper. Additionally, there was a pilot study to ensure the validity by implementing it and analyzing the responses and observing if the subjects had any comments or if some of the questions were unclear.

3.8.2. Reliability

The questionnaire is tested for reliability by assigning a pilot group, consisting of twenty students, who took the questionnaire. Furthermore, the questionnaire was shared with two examiners from ASU Business faculty to look at the instrument and provide their feedback. To ensure the internal consistency of each item of the variable, Crombach's alpha to assess each variable's reliability. the following table shows Cronbach's reliability:

Variable	Number of Items	Number of Respondents	Cronbach's Alpha
Accommodation	15	20	0.72

Table 1: Crombach's alpha.

As shown in the table above which is generated from SPSS the Cronbach's Alpha rate of the pilot study. is 72% which indicate reliable variables used in the study.

Chapter Four: Data Analysis and Findings

Study (1): Financial Incentive

4.1. Descriptive Analysis of Data generated:

This section analyses the secondary data which was obtained from ASU ERP system.

Secondary data refers to the data which already been collected and stored for other reasons

(Weijun, 2008). There are several types of secondary data such as Multiple sources, survey

and documentary data.

The generated date was about some students who received financial aid based on their

academic performance as per ASU scholarships and discount policy. The student's

academic performance before and after implementation of the policy analysed and

compared to find out the effectiveness of the policy in their performance. ASU

Outstanding Achievement Policy was implemented starting from Fall 2018/2019.

To find out the effectiveness of this Policy and its impact on the academic performance of

students, I took a sample of students who are self-funded students (Private students) and

who had a GPA higher than 2.5, considering that students who obtain this grade can

compete for a scholarship for academically outstanding students according to the Policy,

which starts from AGPA Higher than 3.25. Accordingly, a sample of 248 students who

meet the conditions was obtained from different colleges, specializations, and academic

years.

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4.1.1. Colleges:

Table 2:Sample distribution According to Student's Faculty

College	No of Students	Percent
College of Health & Applied sciences (CAS)	10	4%
College of Law (LAW)	55	22%
College of Business Administration (COBA)	157	63%
College of Engineering (COE)	26	10%
Total	248	100%

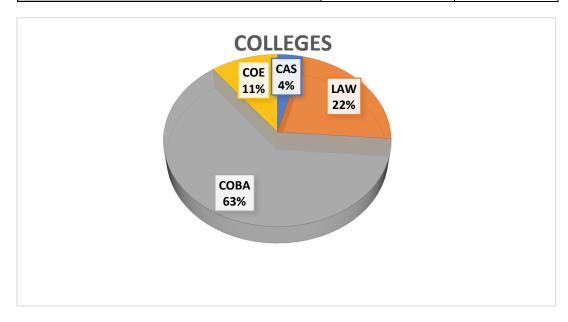


Figure 3: Sample distribution According to Student's Faculty

Above table shows that, the majority of students' sample, 63% are from College of Business Administration followed by College of Law (22%) then College of Engineering (10%) then College of Health & Applied sciences (4%)

4.1.2. Gender

Table 3:Sample distribution According to Student's Faculty

Gender	No of students	Percent
Male	156	63%
Female	92	37%
Total	248	100%

Table 4.2 shows that the percentage of males in the sample that was taken is higher than the percentage of females (67% compared to 33%). The reason for this is the total number of males studying on their own expenses are higher compared to the female students, as most of the female students are accepted into scholarships funded by the government.

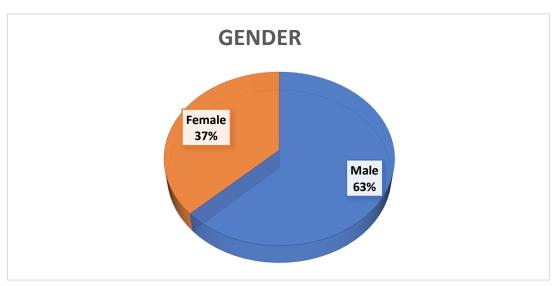


Figure 4: Sample distribution According to Student's gender

4.1.3. Type of funding

All students whose data were collected are students studying at their own expense, as the policy restricted the eligibility for scholarships and discount to private students only.

4.1.4. Program Types:

Table 4:Sample distribution According to the type of programs

Program	No of students	Percent	
Bachelor	158	64%	
Diploma	90	36%	
Total	248	100%	

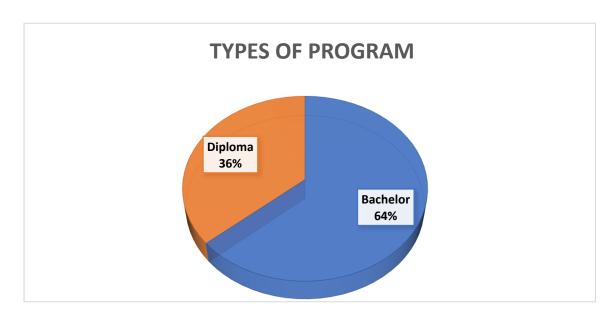


Figure 5: Sample distribution According to Student's gender

Above figure indicates that 64% of the students enrolled in bachelor's degree whereas 63% of the students studying diploma degree.

4.1.5. Academic Year

Table 5:Sample distribution According to academic year.

Academic Year	No of students	Percent
First Year	193	78%
Second Year	23	9%
Third Year	23	9%
Fourth Year	9	4%
Total	248	100%

Above table shows that most of the students are studying in the first academic year (78%) and this indicator might be obvious as normally students in their first year are studying general and introductory courses. The rest of students are studying in their second to fourth year.

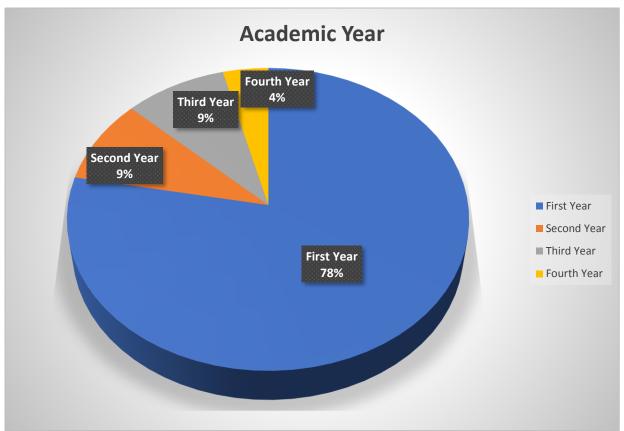


Figure 6: Sample distribution According to Student's Academic Year.

4.2. Descriptive Analysis of the Study (financial incentives)

This section summarizes the descriptive analysis of the impact of financial incentives on the student's academic performance as a result of the implementation of The Outstanding Achieving Students Scholarship Scheme in ASU.

Table 6:Changes in students AGPA before and after policy implementation.

Change in student's GPA	No of students	Percent
Positive Change	145	58%
Negative change	93	38%
No change	10	4%
Total	248	100%

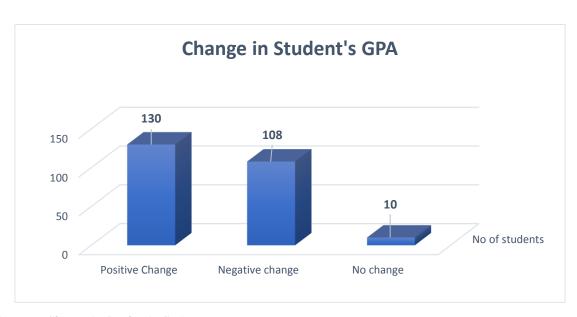


Figure 7: Change in Student's GPA

Above table and figure indicates that majority of the of the sample students (58%) were positively change in their AGPA after the implementation of the policy 38 % of them were negatively changed in their AGPA and 4% only were no change in their grade. Above result clearly indicates the positive effectiveness of the policy in the students' performance.

Table 7:Average AGPA.

Before/after Policy implementation	Average AGPA
Before	3.15
After	3.16
Percent	0.5%

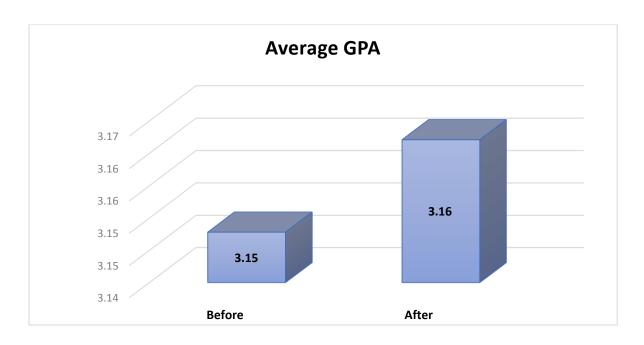


Figure 8: Average GPA.

The other statically evident indicator of the positive impact of the policy on the academic performance of students is the positive change in the average GPA of the student's sample that was analysed, as the average GPA for the student's sample before the policy was launched was 3.15, while the average rate after applying the regulation was 3.16. Despite this slight increase in the average rate, it can be accepted as an indicator of the positive impact of the policy if we consider that this sample of data was taken at the beginning of the implementation of the policy, which may not have marketing well at the beginning of its implementation.

Table 8Average AGPA.

Semester	Student No	AGPA greater than 3.25	Percentage
fall 17/18	2908	246	8%
spring 17/18	2844	288	10%
fall 18/19	3183	589	19%
spring 18/19	3063	568	19%
fall 19/20	3600	845	23%
spring 19/20	3615	1110	31%

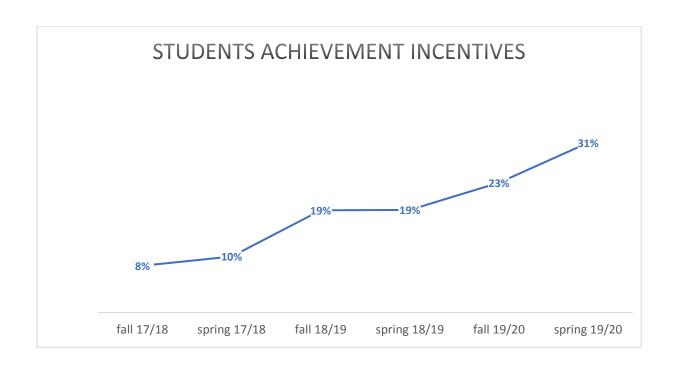


Figure 9:Students who grated (outstanding Students Discount)

4.4. Reliability and Validity of the collected Secondary Data:

According to Flintermann (2014), Data deemed to be reliable and valid if it is gives same result over many times if is processed under same conditions and situation. Moreover, data can be considered reliable and valid if the researcher confident about the source of it (Pierce ,2009). According to Weijun (2008) secondary data considered as reliable and valid if it is answered the objectives and questions of the research which collected for. Based on the above, the data obtained from the university for this study can be considered as reliable data as it was collected from a known and reliable source, which is the University's Admission and Registration Department. In addition, this data fulfils the purpose for which it was collected for, which is to know the effect of financial resources on the academic performance of students at ASU.

Study (2): Student Accommodation:

4.1. Descriptive Analysis of Personal Demographic

In this section, an analysis of the respondents' personal information like age, gender, where they live, academic year, and age is presented. The students are selected at random. There are 200 subjects in this study.

4.1.2. Gender

Table 9:Sample Distribution: Gender

Gender	Frequency	Percentage (%)
Male	46	20%
Female	184	80%
Total	230	100%

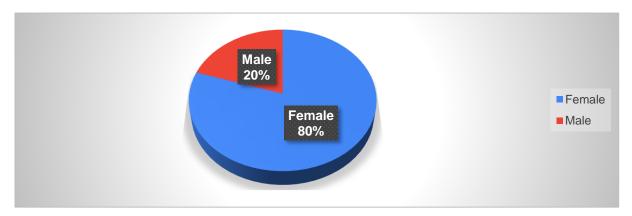


Figure 10: Sample distribution According to Student's gender

Table (9) shows that the female students are at 80% and male students are at 20%. This percentage is representable of the actual numbers as female students numbers are four times the number of male students.

4.1.3. Age

Table 10:Sample Distribution: Age

Age	Frequency	Percentage (%)	
less than 20	64	27.8	
20 - 25	128	55.6	
More than 25	38	16.6	
Total	230	100%	

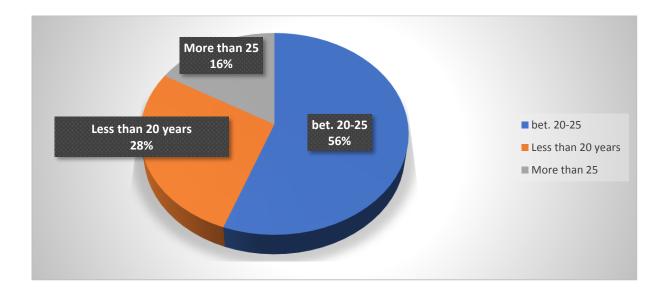


Figure 11: Sample distribution According to Student's Age

Above table and figure shows that the majority of the respondents are between 18 and 25 as that age proportion presents 83.4% of the entire respondents' population. These are students who are most probably pursuing their diploma or bachelor degrees.

4.1.4. Place of Living

Table 11:Sample Distribution: Place of Living

Place of Living	Frequency	Percentage (%)	
Off Campus	51	22.1%	
On Campus	114	49.6%	
I live with my family	65	28.3%	
Total	230	100%	

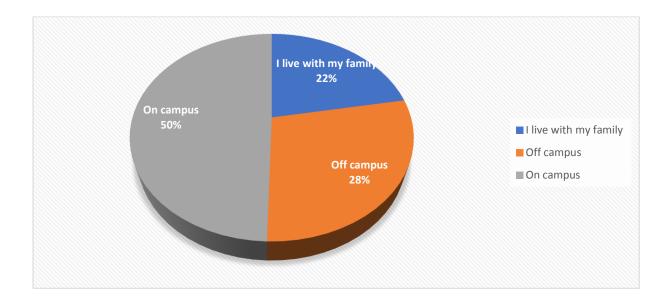


Figure 12: Sample distribution According to place of living

The table above and figure illustrates that the students have different living places. However, nearly 50% of the surveyed students live on ASU campus which are within walking distance from the classrooms, library and computer labs. It is noticeable that approximately 28% of the students live with families; this is due to the location of Ibra where the campus is as it is within one-hour reach from the big populated areas in A'Sharqiyah region.

4.1.4. Academic Year

Table 12:Sample Distribution: Academic Year

Academic Year	Frequency	Percentage
1	30	13%
2	76	33%
3	58	25.2%
4	47	20.4%
5	19	8.3%
Total	230	100%

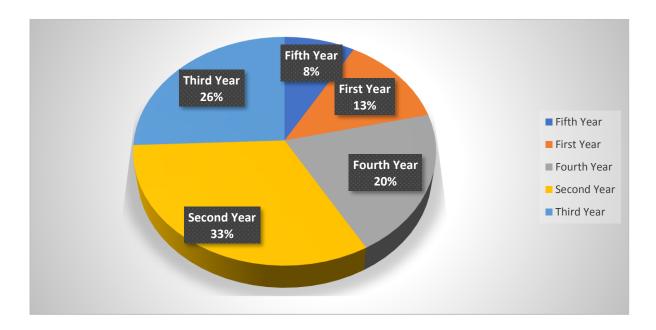


Figure 13: Sample distribution According to Academic Year

The table and figure shows that the majority of the subjects are in their first, second, or third year. The least number of respondents are in their fifth year. It is worth mentioning here that students spend between 3-4 years earning their diploma degree and 4-5 years to earn their

bachelor degree. This includes the Foundation Year that students spend studying English, IT and basic math.

4.1.5. GPA Score

Table 13:Sample Distribution: GPA Scores

GPA	Frequency	Percentage (%)
Below 1.99	7	3%
2-2.49	18	7.8%
2.5 - 2.99	88	38.2%
3.0 - 3.49	104	45.2%
above 3.5	13	5.8%
Total	230	100%

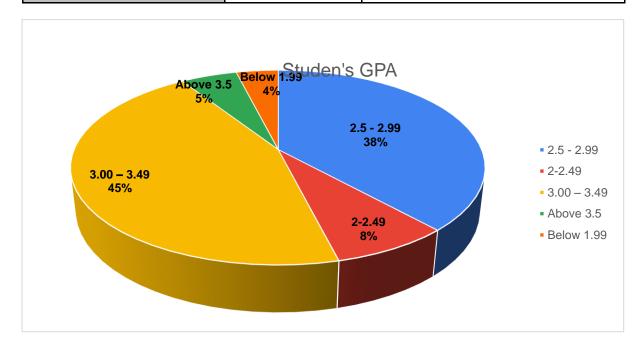


Figure 14: Sample distribution According to Student's GPA

The figure above illustrates that the majority of respondents, around 83.4% scored a 2.5 - 3.49 which is the normal curve. However, 10.8% are less than 2 point GPA and only 5.8% are above 3.5.

4.2. Descriptive Analysis of Study Variables

In this section, the individual variables and their contributing attributes are analyzed. The students' accommodation has three attributes: student commute, facilities available in oncampus housing, and living arrangements in the on-campus housing.

The scale used to measure the items and capture the opinions of the respondents is Likert Scale that has five categories (Siramkaya, 2015). When evaluating the questionnaire, scores were taken into consideration, and the intervals shown in the table below.

Table 14:Gap Widths of Quintet Scale

Item	Item Description	Score Range
5	Strongly Agree	4.21 - 5.00
4	Agree	3.41 - 4.20
3	Neutral	2.61 - 3.40
2	Disagree	1.81 - 2.60
1	Strongly Disagree	1.00 -1.80

4.2.2. Facilities Available in the on-campus Housing

Table 15:Descriptive Analysis: Facilities Available

Facilities Available	N	Min.	Max.	Mean	Std. Deviation
Item 1	230	1	5	2.6	1.1
Item 2	230	1	5	3	1.06
Item 3	230	1	5	3.7	1.03
Item 4	230	1	5	3.8	0.93
Items 1-4	230	1	5	3.3	0.994

The data analysis above was conducted to better understand the respondents' opinions about the impact of students' housing on the academic performance of students; looking at *facilities available in the on-campus housing*. The table shows the number of respondents in each item, the lowest and highest respondents' Likert scale choices, the mean, and the standard deviation per item and for all the items. The mean scores are mixed and fall within the neutral and agree ratings. However, it is worth mentioning that the two items that were within the neutral rating were related to the availability of the Learning Resources Centre near the students housing and the availability of the facilities within the accommodation. On the other hand, the two items that were within the *agree* level are the ones related to provision of places where students can read and study and the library being well-stocked with reading materials.

4.2.3. Students Commute

Table 16:Descriptive Analysis: Students Commute

Facilities Available	N	Min.	Max.	Mean	Std. Deviation
Item 1	230	1	5	2.9	1.16
Item 2	230	1	5	2.97	1.14
Item 3	230	1	5	4	1.05
Item 4	230	1	5	4	0.98
Items 1-4	230	1	5	3.5	1.03

The data analysis above was conducted to better understand the respondents' opinions about the impact of students' housing on the academic performance of students; looking at *students' commute*. The table shows the number of respondents in each item, the lowest and highest respondents' Likert scale choices, the mean, and the standard deviation per item and for all the items. The mean scores are mixed and fall within the neutral and agree ratings. However, it is worth mentioning that the two items that were within the neutral rating were related to the missing classes due to travel time between the university and the respondents' place of accommodation and if commute time takes away from study time. However, the mean for the items is within the *agree* rating.

4.2.4. Living Arrangements of the on-campus Housing

Table 17:Descriptive Analysis: Living Arrangements

Facilities Available	N	Min.	Max.	Mean	Std. Deviation
Item 1	230	1	5	3.5	1.1
Item 2	230	1	5	3.1	1.06
Item 3	230	1	5	3.5	0.94
Item 4	230	1	5	3.6	1.03
Items 1-4	230	1	5	3.44	1.07

The data analysis above was conducted to better understand the respondents' opinions about the impact of students' housing on the academic performance of students; looking at *living arrangements of the on-campus housing*. The table shows the number of respondents in each item, the lowest and highest respondents' Likert scale choices, the mean, and the standard deviation per item and for all the items. The mean scores are mixed and fall within the neutral and agree ratings. However, it is worth mentioning that the one item that was within the neutral rating was that the respondents can study due to the accommodation being not crowded. and the respondents' place of accommodation and if commute time takes away from study time. However, the mean for the items is within the *agree* rating.

4.3. Normality Test

Linear regression analysis and parametric statistical analysis e.g. t-test, imply that interpretation and outcomes cannot be valid or reliable if the normal distribution is broken.

To test the normality of the distribution of the sample, the Q-Q Plot is used.

The Q-Q chart below shows that the students commute data is normally distributed.

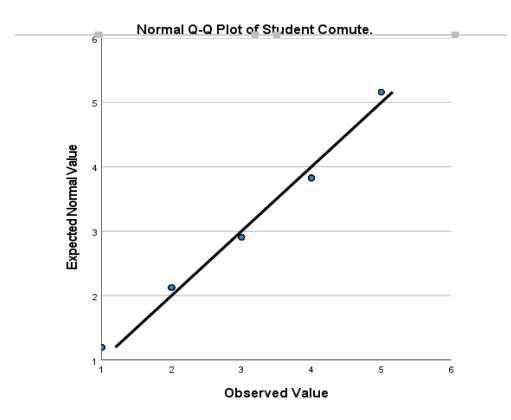


Figure 15:QQ Plot for Student Commute

The Q-Q chart below shows that the Facilities availability data is normally distributed.

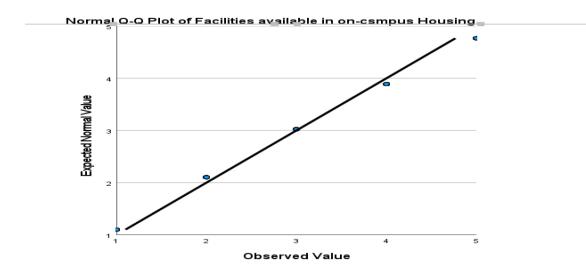


Figure 16:QQ Plot for Facilities availability

The Q-Q chart below shows that the Living arrangements data is normally distributed.

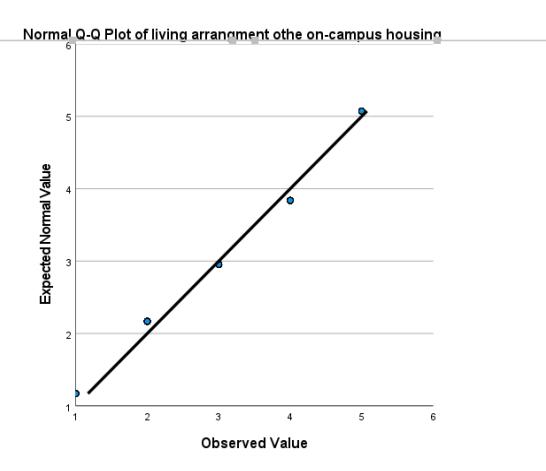


Figure 17:QQ Plot for Student Commute

4.4. Reliability Test

Table 18: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.810	15

4.5. Hypotheses Tests

SPSS provides several analysis tools e.g. Pearson correlation coefficient, Linear and multiple regression test to test the study hypothesis. In this study, there are two types of statistical tests: either null hypothesis or alternative hypothesis. Null one implies that the independent and dependent variables have no change and no relationship ($\mu 1 = \mu 2$). Conversely, the alternative

hypothesis suggests that independent and dependent variables are related, either positive or negative. ($\mu 1 \neq \mu$ 2).-The selection of whether to accept a hypothesis or reject it is that if the correlation significant value (p-value) if it is less than the determined value which is p-value is less than 0.05 then the researcher has to reject this hypothesis and select an alternative one. The below table shows the strength of the relationship between the variables (Perry, Brownlow, Cozens, 2004).

Table 19:Correlation Coefficient

S.NO	Correlation Coefficient ®	Relation Strength
1	Less than 0.29	Weak
2	From 0.3 to 0.49	Moderate
3	More than 0.5	Strong

The multiple regression test is implemented to analyse the relation between two or more dependent and independent variables. Also, it is used to differentiate between the importance of each variable and its influence (Perry R. Hinton et al., 2004).

Table 20:Multiple regression test

				Living	
	1		Student	Arrangement	Academic
		Available	Commute	s	Performance
Facilities Available	Pearson	1	.374**	.580**	.470**
	Correlation				
	Sig. (2-tailed)		.000	.000	.000
	N	230	230	230	230
Student Commute	Pearson	.374**	1	.321**	.365**
	Correlation				
	Sig. (2-tailed)	.000		.000	.000
	N	230	230	230	230
Living Arrangements	Pearson	.580**	.321**	1	.436**
	Correlation				
	Sig. (2-tailed)	.000	.000		.000
	N	230	230	230	230
**. Correlation is sign	ificant at the 0.0	01 level (2-t	ailed).		

A Pearson correlation analysis was conducted to examine the relationship between the attributes of the Students' Accommodation, the independent variable, and the Academic Performance, the dependent variable. The attributes are: Facilities Availability, Students' Commute, and Living Arrangements.

The findings showed that there is a significant positive correlation between the three attributes of students' housing and academic performance. The correlation between the Facilities Available and Academic Performance is 0.470, Sig. =0.000 and N=230, this shows high level association between the Facilities Available and Academic Performance. The correlation between the Students' Commute and Academic Performance is 0.4365, Sig. =0.000 and N=230, this shows high level association between the Students' Commute and Academic Performance. The correlation between the Living Arrangements and Academic Performance is 0.436, Sig. =0.000 and N=230, this shows high level association between the Living Arrangements and Academic Performance.

Table 21:Multiple Regression Test Results

Descriptive Statistics		Model	Summary	ANOVA		Coefficients	
		R	R Square	F	Sig.	Beta	Sig.
Variables							
	Facilities Available					0.47	0.000
Students'	Students' Commute	0.423	0.178	50.9		0.365	0.000
Accommodation					0.00		
	Living Arrangements					0.4	0.000

H1- There is a positive relationship between an Outstanding Achievement Policy and academic performance.

The statistical evidence shows that the Outstanding Scholarship Policy was effective in motivating the students to perform better. It is noticed 8% of the students who got this policy of the total number of the registered students in Fall Semester 2017/18 increased rapidly to 31% in Spring 2019/20. This shows a positive relationship between the implementation of the incentive policy and the students' academic performance.

H2- There is a positive relationship between student accommodation and academic performance.

This study uses SPSS to examine the hypotheses. Here, the R-square is 17.8% which explains the level of variation in the students' accommodation in relation to the academic performance. Moreover, the P-value is less than 0.05 which means that the relationship between the Students' Accommodation and Academic Performance is statistically significant.

4.6. Accepted Hypothesis

From the above section, the conclusion is that H1 and H2 are both accepted. Firstly, H1 is accepted as there is a clear correlation between the implementation of the incentive policy and the number of students whose GPAs increased post policy implementation. Second, H2 is accepted as there is a significant positive relationship between the Students' Accommodation and Academic Performance.

Chapter Five: Conclusion and Recommendation

This sections summarizes the major findings of the study, the recommendations and limitations.

5.1. Discussion and Conclusions

This study looks at two independent variables: Incentive and Students' Accommodations in relation to the dependent variable: Academic Performance. This study employed two different data elicitation methods. For the Incentive; the researcher looked at the implementation of the Outstanding Students Policy which offers scholarships to students based on their academic attainment i.e. GPA. The other tool is a questionnaire to elicit the opinions and capture the attitudes of ASU students towards students' Housing and its impact on their academic performance.

The study sets off with two hypotheses:

H1- There is a positive relationship between an Outstanding Achievement Policy and academic performance.

According to Motivation Incentive Theory, people change their behavior and make more effort due to internal and external factors such as survival, reward and recognition. The findings of this study supports this theory. The number of students whose GPA is 3.25 or above increased from 8% in 2017/18 to 31% in 2019/20.

H2 - There is a positive relationship between student accommodation and academic performance.

As for the second hypothesis, it is accepted that there is a positive relationship between the students' accommodation and the academic performance. This is consistent with the literature that suggests Students' Accommodation plays a positive to minimal role in students' success academically. According Owolabi (2015), there is no significant role of students' housing on academic performance. However, there are some studies that suggest there is a statistically significant relationship between the two in studies carried out in the USA. Here, it is worth mentioning that all the students who reside in the dorms now, at ASU, are female students. It is the culture here in Oman that females are less lik ely to leave the house to hang out outside

the house while it is more likely for males; particularly at age of our target group: university students.

5.2. Recommendations

This study has to offer a number of recommendations to the University community and the Higher Education, Research and Innovation. It is recommended for:

- 1) The decision makers at ASU to continue the Outstanding Students Scholarship Policy as it both managed to enhance the academic achievement of the students and to reduce the number of students under probationary period.
- Decision makers at ASU should seriously consider investing in building more accommodation for both male and female students as it has been shown it enhances the academic performance.
- 3) Decision makers at ASU to provide transport for students who live off campus.
- 4) Decision makers should consider conducting exit interviews for students who want to leave ASU as they might leave due to an inadequate housing.
- 5) Decision makers should plan more study spaces for students to be able to read and study.
- 6) Decision makers should provide safe and comfortable environments for the students to excel and monitor the housing for unwanted behaviour that can hinder studying.

5.3. Study Implications

This study was carried to better understand the two independent factors: Incentive and Student Accommodation. The findings of both studies are consistent with the existing body of theories. This study is significance to the body of the knowledge is that it adds to the literature in the Omani context of higher education. This study gives future researchers a foundation for further studies.

This study explored the relationship between Incentive, in form of a scholarship here, and the academic performance. The study has added value as it highlighted that there is a positive relationship between the two shown in the increase in the students' GPAs. This insight is important as ASU has implemented this system to enhance the student academic performance reflected in their GPAs. The outcome shows that this system is working and should be adopted in other HEIs that seek to improve the academic performance of their students.

The other relationship that the study explored was the relationship between provision of student housing and their academic performance. The study showed that there is a positive relationship based on the answers of ASU students to a survey that was circulated to 250 students. The study shed some light on different aspects such as the facilities provided, student commute, and the living arrangements in the on-campus housing. The study added some value as it brings some details of the housing to the front line and explored their importance to the students by surveying their attitudes towards them. This helps HEIs provide better housing that provide a good environment to perform better academically.

5.4. Limitations and Future Studies

The size of the sample might not have representative of the whole population of ASU. Only 230 students were surveyed out of 4,300, which is 5% of ASU student population. For future studies, it would be more accurate and complete to have more subjects. A larger sample provides more accurate findings to allow generalization of the results. The timing of questionnaire might have been off as some of the students who participated were first year students who might not have lived in students' housing. Their opinions and attitudes might not be reflective as they have not gotten the experience. Another limitation is that this study is carried at one of the HEIs in Oman, ASU. The results might be different if the subjects belonged to various HEIs.

There are a number of suggestions for future researchers who might undertake a similar study in the future, they are as follow:

- Increase the sample size and include more students from other HEIs as ASU might be doing something well or is behind if benchmarked with other HEIs. Inclusion of more students from other HEIs provides a more realistic and accurate picture of the factors in hand.
- This study adopts a descriptive quantitative analysis for both factors. It would be useful to explore the independent variables using other research methods e.g. qualitative to better understand the relationship between the variables and academic performance.

References

- Owolabi, B. O. (2015). The effects of students' housing on academic performance at the University of Ibadan in Nigerian. *International Journal of Scientific & Engineering Research*, 6(3), 1118–1132.
- Delucchi, M. (1993). Academic performan
- ce in college town. EDUCATION-INDIANAPOLIS-, 114, 96.
- Nabaseruka, J. (2010). Effect of students' living conditions on their academic performance in secondary schools of Goma Sub County, Mukono District. Makerere University.
- de Araujo, P., & Murray, J. (2010). Estimating the effects of dormitory living on student performance. *Available at SSRN 1555892*.
- Macintyre, C. (2003). New models of student housing and their impact on local communities. *Journal of Higher Education Policy and Management*, 25(2), 109–118.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. *Handbook of Industrial and Organizational Psychology*, *1*(2), 75–130.
- Weiner, B. (2008). Reflections on the history of attribution theory and research: People, personalities, publications, problems. *Social Psychology*, *39*(3), 151–156.
- Logan, F. A. (1968). Incentive theory and changes in reward. In *Psychology of Learning and Motivation* (Vol. 2, pp. 1–30). Elsevier.
- Singell Jr, L. D. (2004). Come and stay a while: does financial aid effect retention conditioned on enrollment at a large public university? *Economics of Education Review*, 23(5), 459–471.
- John, E. P. S., & Noell, J. (1989). The effects of student financial aid on access to higher education: An analysis of progress with special consideration of minority enrollment. *Research in Higher Education*, 30(6), 563–581.
- Cabrera, A. F., Stampen, J. O., & Hansen, W. L. (1990). Exploring the effects of ability to pay on persistence in college. *The Review of Higher Education*, *13*(3), 303–336.

- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, *19*(2), 109–134.
- Richburg-Hayes, L., Brock, T., LeBlanc, A., Paxson, C. H., Rouse, C. E., & Barrow, L. (2009). Rewarding persistence: Effects of a performance-based scholarship program for low-income parents. *Available at SSRN 1353360*.
- Brock, T., Richburg Hayes, L. K., Barrow, L., & Rouse, C. E. (2009). Paying for Performance: The Education Impacts of a Community College Scholarship Program for Low-Income Adults, Working Paper 2009-13.
- Fryer Jr, R. G. (2011). Financial incentives and student achievement: Evidence from randomized trials. *The Quarterly Journal of Economics*, 126(4), 1755–1798.
- Richards, K. A. R., & Levesque-Bristol, C. (2014). Student Learning and Motivation in Physical Education: Column Editor: Roger Jackson. *Strategies*, 27(2), 43–46.
- Barrow, L., & Rouse, C. E. (2013). Financial incentives and educational investment: The impact of performance-based scholarships on student time use. National Bureau of Economic Research.
- OECD. (2011). Nuclear Science Shielding Aspects of Accelerators, Targets and Irradiation Facilities-SATIF 10: Workshop Proceedings, Geneva, Switzerland 2-4 June 2010. OECD Publishing.
- Perry Jr, W. G. (1999). Forms of Intellectual and Ethical Development in the College Years: A Scheme. Jossey-Bass Higher and Adult Education Series. ERIC.
- Walker-Dalhouse, D., & Risko, V. (2008). *Homelessness, poverty, and children's literacy development. The Reading Teacher, 62*(1), 84-86.
- King, C. (2018). Food insecurity and housing instability in vulnerable families. *Review of Economics of the Household*, 16(2), 255-273.
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychological review*, 82(1), 1.

- Education in the Sultanate, 2019. (n.d.). Retrieved November 30, 2020, from https://www.educouncil.gov.om/en/page.php?scrollto=start
- Vision, Mission and Values, Oman Academic Accreditation Authority. (n.d.). Retrieved November 30, 2020, from http://www.oaaa.gov.om/About.aspx
- OAAA establishment and responsibilities, Oman Academic Accreditation Authority. (n.d.). Retrieved November 30, 2020, from http://www.oaaa.gov.om/About.aspx

Appendix (1): Questionnaire

The Effect of Students' Housing Provision on Academic Performance

Dear Student,

Thank you for giving me some of your time to complete this questionnaire. This questionnaire aims at better understanding of the effect of provision of students' housing on the academic performance of A'Sharqiyah University (ASU) Students. This study is done as a part of my Maters of Business Administration Degree at ASU. The questionnaire should take 5 minutes to be completed. Your answer will be treated anonymously and confidentially.

Again, many thanks for your time to complete the questionnaire.

شكرا لوقتك في إكمال هذا الاستبيان الذي يهدف لفهم العلاقة بين توفير سكن بالجامعة وتأثيره على التحصيل الدراسي في جامعة الشرقية, سيستغرق ملء هذه الاستمارة ٥ دقائق من وقتك، سيتم التعامل مع الإجابات بكل سرية وبشكل مهنى.

مثمن لكم و قتكم لإكمال الاستبانة

Personal Demographics	البيانات الشخصية
Age: o Less than 20 years o 20-25	العمر oأقل من 20 سنة o 20 - 25
o More than 25	أكثر من 25 سنة $oldsymbol{o}$
Gender:	الجنس
o Male	ەذكر oأنثى
o Female	oأنثى

Where do you	Where do you live when studying?					بة؟	ة الدراس	ن في فتر	أين تسك
o Off campus						بية	ت خارج	في سكناه	D
o On campus				وفي سكن مو فر من قبل الجامعة					
o I live with my family							ائلة	منزل الع	0
Academic Year	? :							إكاديمية:	السنة الا
o 1								0	1
o 2								0	2
0 3								0	3
o 4								0	4
0 5								0	5
o Other: Spec	ify	•••••						27 2	أخرى،
What is your G	SPA?						ِاکمي؟	عدلك التر	 ما هو م
o Below 1.99							1.99	أقل من (D
o 2.00 – 2.49				o 2.00 – 2.49					
o 2.50 – 2.99				o 2.50 – 2.99					- 2.99
o 3.00 – 3.49				o 3.00 – 3.4					- 3.49
o Above 3.5				0 أكثر من 3.5					D
Please indicate statements:	the degre								
		الموضح.	الية حسب	لل من العبارات الة	گ علی ک	مو افقتك	ی درجا	لإشارة إل	یرجی ا
1 2	,	3	4		5				
Strongly D	Disagree	Neutral	Agree		Strongly Agree				
ق Disagree	غير موافز	محايد	موافق		موافق بشدة				
غير موافق بشدة									
1			ı						
Accommodation			Survey Scale						
توفر السكن								لاستبانة	مقياس ا
						ı	Т		

I miss classes due to the travel time between my accommodation and the University. ! الله المحاضر المحاضر المحاضر المحاضر الله المحاضر المحاضر المحاضر المحاضر المحاضر المحاضر الله المحاضر		
I spend lots of time on transportation between my accommodation and the University which takes away from my study time. أقضي وقت طويل في التنقل من مكان اقامتي إلي الجامعة الذي يأخذ من وقت المذاكرة.		
I use the Learning Resources Center (LRC) because it is closer to my accommodation. استخدم مرکز مصادر التعلم لأنه قریب من مکان إقامتي.		
I have all the facilities at my accommodation that enable me to perform better academically. يحتوي مقر إقامتي على جميع المرافق التي تمكنني من النجاح الأكاديمي.		
I can study because the people I live with are good. أستطيع المذاكرة لأن الذين أعيش معهم جيدين.		
I can study because the accommodation is not populated. أستطيع المذاكرة لأن مكان إقامتي غير مكتظ.		
I am motivated to read and study more because the people I live with do study and read. أتشجع للدراسة لأن الذين أعيش معهم يقرأون ويدرسون.		
I feel safe and comfortable where I live and that encourages me to study more. أشعر بالأمان و الراحة حيث أعيش وهذا بدوره يشجعني على الدراسة.		

Academic Performance الآداء الأكاديمي	Survey Scale مقياس الاستبانة				
Regular attendance of classes enhances my academic performance. الحضور المنتظم للمحاضرات يعزز آدائي الأكاديمي.	1	2	3	4	5
The discussion in class deepen the understanding of the materials which helps me perform academically better. المناقشات في الصف تعمق فهم المادة و هذا يساعدني في تحسين آدائي بشكل أفضل.					
The availability of study space (classroom & accommodation) support my academic achievement. و جود مساحات للدراسة (صفوف و في السكن) يدعم تحصيلي الأكاديمي.					
The provision of study spaces and dedicated reading areas motivates the students to spend more time studying which improves their academic achievement. الاداء الأكاديمي يحسن الإداء الأكاديمي					
ASU library is well-stocked with reading materials that improve my performance academically. المكتبة بجامعة الشرقية ممتلئة بمواد للقراءة التي من شأنها تطوير آدائي الاكاديمي.					
The availability of reference books and extra reading materials in the library encourages the students to read which enhances the academic performance of students. توفر المراجع و كتب إضافية تتعلق بالمادة تشجع الطلبة على القراءة و تعزز .					
Peers who dedicate time to studying motivate me to perform well academically. الأقران الذين يكرسون وقت للمذاكرة يدفعوني لأقدم الافضل أكاديميا					

Any comments?	
	هل لديك تعليقات أخرى؟
	••••••

Should you have any question	ons or inquiries, please let me know via
	<1706226@asu.edu.om>
Thank you for your time!	
	ان كان لديك أي أسئلة أو تساؤلات الرجاء التواصل على البريد التالي
	1706226@asu.edu.om
	شكر ا لو قتك الثمين!

Appendix (2)

The Outstanding Achieving Students Scholarship Scheme

This scheme was developed to attract high achieving high school graduates to the University and to motivate ASU current students, who are self-funded, to improve the students' academic performance during their tenure at the University. This Scheme can be easily traced to ASU mission; to contribute to the economic and social development of the region. (ASU Website, 2020). By applying this scheme, the University aims to improve academic performance by incentify more effort and persistence made by the students; which improves the overall quality of the graduating students. To be eligible for the scholarship, a student should satisfy the following criteria:

- 2. The student must fulfill the admission requirements to the University in the specialization that they intend to pursue.
- 3. The student must have obtained a minimum score of 80% in the general diploma or its equivalent. Such a student will be eligible to receive a discount of 50% on the tuition fees payable for the first semester after the completion of the foundation program.
- 4. After completion of the first semester in the relevant College, the following discount levels shall apply on the tuition fees payable in subsequent semesters:
 - A 75% discount will be granted to a student whose cumulative GPA is not less than 3.8
 - A 50% discount will be granted to a student whose cumulative GPA is 3.65 and above but less than 3.8
 - A 25% discount will be granted to a student whose cumulative GPA is 3.25 and above but less than 3.65.
 - In addition, ASU provides 5 full scholarships each year for student who achieving score 90% and above in general diploma (Secondary School)

This paper looks into the effectiveness of this scheme when the students are admitted to ASU.

The conditions of eligibility to the scheme, the students need to get a certain GPA in a semester to receive the scholarship which is only valid for one semester and to receive it again the students need to maintain the GPA. The scholarship amount is subject to increase, decrease, or discontinue based on the student's academic performance. The change in the scholarship is based on point (3) above.

This scheme was implemented in Fall 2018 to incentify the students to work hard academically, to make the effort to succeed and to persist in their studies. Two hundred eighty-five students have benefitted from the scheme.